

BENCHMARKS

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NORTH TEXAS STATE UNIVERSITY

DECEMBER 1982

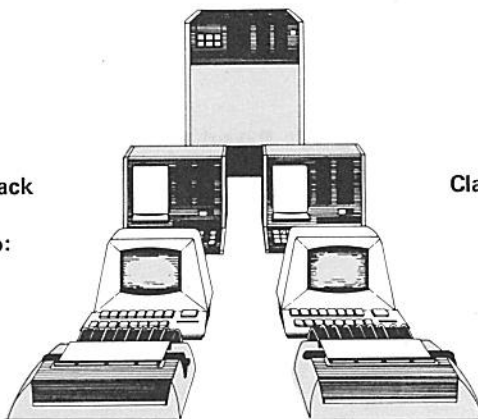
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BENCHMARKS Reader/User feedback
is encouraged.

Send all letters, suggestions, etc., to:
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Services Available To Users Of The NTSU Computing Facilities

All people mentioned below may be contacted by calling
(817) 565-2324:

Information and Project Numbers- Carolyn Goodman in the
Computing Center reception Area, ISB 119.

Test Scoring and Analysis - Carolyn Goodman.

Newsletter Questions/Contributions/etc. - Claudia Putnam.

Statistical/Research Support (provided for graduate students
and faculty members) - Bob Brookshire, George Morrow,
Claudia Putnam, and Mohamad Salahshoor.

Non-Research Student Programming Problems - student consultants
from the Computer Science Department, found in ISB 134A
near dispatch and the user keypunch area. Student
consulting provided by the College of Business is
available at the BA Computing Access Facility.

JCL and Debugging Problems - Mohamad Salahshoor.

Pre-Research Counseling, Including Survey Instrument Design -
Bob Brookshire, George Morrow, and Claudia Putnam.

Data Entry to MUSIC, Keypunch Requests and Questions Regarding
Layout of Keypunch Sheets; Interpreting - Betty Grise,
ISB 227.

Academic Timesharing Information and/or Problems HP/2000 and
AS/5000 MUSIC (McGill University System for Interactive
Computing) information and problems, including terminal
problems - Mohamad Salahshoor.

Administrative Applications - Coy Hoggard.

AS/5000 Computer Hardware/Software/Billing Problems - Sandy
Franklin.

JOB Submission and Retrieval - RJE Operators.

Fall Computing Hours

Computing facilities will be open during the following times
throughout the Fall semester (not applicable to holidays):

Computing Center RJE: 7 AM-4 AM, Monday-Friday; 8 AM-MN
Saturday; Noon-MN Sunday.

College of Business RJE: 8 AM-MN, Monday-Saturday; Noon-MN
Sunday.

Media Library (GAB): 8 AM-MN, Monday-Thursday; 8 AM-6 PM
Friday; 11 AM-5 PM Saturday; 4 PM-10 PM
Sunday.

EXTENDED END-OF-SEMESTER HOURS

The College of Business RJE station will be open from 8 AM until 1 A Monday through Friday, 8 AM until midnight Saturday, and noon until midnight Sunday for "the end-of-semester crunch" ending December 17.

HOLIDAY HOURS

The following hours will be in effect over the Christmas Holidays:

Computing Center RJE	:	CLOSE Midnight, November 17; OPEN 8 AM - Midnight, December 18; CLOSED December 19 OPEN 8 AM - Midnight; December 20-23; CLOSED December 24 - 26 OPEN 9 AM - 5 PM, December 27 - 30; CLOSED December 31 - January 2 OPEN 8 AM - Midnight, January 3 - 8; Noon - Midnight, January 19 8 AM - Midnight, January 10-15; Noon - Midnight, January 16; REOPEN January 17 - resume regular hours.
College of Business RJE	:	CLOSE Midnight, December 17; REOPEN 8 AM, January 17 - resume regular hours.
Media Library	:	CLOSE 5 PM, December 23; OPEN 8 AM - 5 PM, Monday - Friday, January 3 - 14; REOPEN 11 AM, January 15 - resume regular hours.

BACKUP SCHEDULE FOR OS/MVT

OS/MVT disk packs (Academic and Administrative) are backed up daily, Tuesday through Saturday, from 4-5 AM, and Sunday from Noon to 1 PM. A backup of all the operating systems and their contents is done once every two weeks at some low activity period over the weekend.

NEW RULES FOR TAPE PROCESSING

Beginning January 3, 1983, tapes in the Computing Center will be under control of UCC ONE, an automated tape management system (TMS). As of that date, we will no longer mount user-owned tapes for normal process-

ing. If you are currently using your own tapes, you must follow the directions below to copy your tape to a center-owned library tape volume. Please complete the form in the back of this newsletter and bring it with you when you come to make the copy. Computing Center personnel will be available December 6-10 from 1:00 p.m. to 8:00 p.m. in the Dispatch area (ISB 134) to assist you with the copy procedures. (If possible, please bring JCL for a job which uses the tape.) After next week assistance will be available on an appointment-only basis.

The Computing Center will keep the new library copy in the tape library and mount it when your JCL calls for it. You will reclaim your original after the copy is made. Uncopied user-owned tapes still in the Center as of February 1, 1983, will be returned to their owners or departments.

All tapes in the library will have IBM standard internal labels. You can tell if your tape has a standard label by looking at the JCL you use to access it. If the DD card for the tape has LABEL=(n,SL) or LABEL=n (where n is a number indicating the file number on the tape), or if there is no LABEL= field, then the tape has a standard label. If there is a LABEL= field with anything else, the tape does not have a standard IBM label.

If your tape already has a standard label, the copy will be identical to your tape except for the volume serial number in the label. When you pick up your tape after it is copied you will be told what name to use in future references to the tape. The only change required for your JCL will be to change VOL=SER=oldname to VOL=SER=newname on any DD cards referencing the tape.

If your tape does not have a standard label, then you will need to specify a little more information when you submit the tape for copying, and then you will need to change some other fields in your JCL. See the example below.

To have your tape copied, complete the request form at the end of the newsletter and bring it with you to ISB 134. You may request that any or all of the files on the tape be copied. Most copies can be done overnight. When you return to pick up your tape, you will receive information about the library tape used, including the Volume Serial Number and Dataset Names on the tape.

Installation of the Tape Management System will allow us to provide better service and tape management. We hope that the inconvenience of copying your tapes will not be too great. If you have any technical questions about this procedure, please contact Academic Computing Services at 565-2324.

- If your tape has a standard label:

Complete the form down through the 'Files to be copied'. The library copy will be identical to your tape except for the volume serial. Your only JCL change would be like this (assume your original is labeled MYTAPE and the new library copy is 100999):

```
old jcl  //DDCARD  DD DSN=MY.DATASET.NAME,UNIT=TAPE9,  
          //      VOL=SER=MYTAPE,LABEL=(1,SL),DISP=(OLD,KEEP)
```

```
new jcl //DDCARD DD DSN=MY.DATASET.NAME,UNIT=TAPE9,
// VCL=SER=100999,LABEL=(1,SL),DISP=(OLD,KEEP)
```

- * If your tape is nolabel (LABEL=n,NL) :
In order to process your nolabel tape, you currently must supply some DCB information in your JCL. This information will be copied into the label of the library copy, so you need to transcribe the DCB information from your JCL onto the copy request form to be sure that the system knows what your tape looks like. Then, when using the library copy, you may omit the DCB information from your JCL (You may continue to specify it if you so choose).

The library copy of your tape will also need a dataset name for each tape file. If your JCL has a 'DSN=' field specified, you may want to use that name. If not, you need to choose a name for your file. We urge you to use the standards for naming disk datasets when choosing a tape dataset name. If you plan to catalog your tape dataset, we strongly urge use of standard names. (It is likely that in the near future non-standard dataset names will not be allowed in the system catalog).

When you access the library copy of your tape, you will need a few more changes to your JCL. Let's assume that the sticker on your old tape said NLTAPE and you used the DD card below when you wanted to read it.

```
//DDCARD DD UNIT=TAPE9,VOL=SER=NLTAPE,LABEL=(1,NL),DISP=OLD,
// DCB=(LRECL=80,BLKSIZE=4000,RECFM=FB,DSORG=PS)
```

Notice that there is no DSN= field. That is because no dataset name is required on a nolabel tape. For a standard label tape, however, the DSN on the tape must match the one in the JCL.

The DCB= field provides information about the format of your file. This information will be stored in the label of the library copy, so the system can get it from the tape itself. If you continue to include it in your JCL, the system will use the values from your JCL.

Assume I choose to name my file USER2.D1234.P4321.MYNEW.FILE. I supplied that name and the DCB information on the copy request. If the library tape volume for my file is now 100123, I would need to use the DD card below instead of the one above.

```
//DDCARD DD UNIT=TAPE9,VOL=SER=100123,DISP=OLD,
// DSN=USER2.D1234.P4321.MYNEW.FILE
```

(And I could include the DCB= information as well.)

- * If your tape is neither SL or NL (AL or NSL, for example), then contact Academic Computing Services for additional information.

USING THE COMPUTER FOR RESEARCH: PART VIII - SPSS CONTINUED
By Bob Brookshire

This article is the seventh in a series of articles on computing and data analysis. The previous articles appeared in BENCHMARKS Volume 3, Numbers 2 - 8.

Example SPSS Program

Table 1.14 shows an example program incorporating many of the program control statements described so far, as well as the job control language required.

Table 1.14

SPSS Program for the Example Data

```
/INC OSJE
SYSTEM='OS',TYPE='STUDENT',RETURN
//MU99SPSS JOB (3275-3277,;20,2),'ADAMS, JOHN',CLASS=A
// EXEC SPSS
//SYSIN DD *
RUN NAME      ANALYSIS OF RESEARCH METHODS CLASS DATA
DATA LIST     FIXED/1 STUDENT 1-2 GENDER 3 (A)
              TEST1 4-5 TEST2 6-7 TEST3 8-9
INPUT MEDIUM  CARD
N OF CASES    20
MISSING VALUES STUDENT (99) GENDER (0)
COMPUTE       AVERAGE = (TEST1 + TEST2 + TEST3) / 3
RECODE        GENDER ('M' = 1) ('F' = 2)
RECODE        TEST2 (0 THRU 65 = 1) (66 THRU 80 = 2)
              (81 THRU 99 = 3)
CONDESCRIPTIVE TEST1,TEST3,AVERAGE
READ INPUT DATA
/INC CLASS.DATA
END INPUT DATA
CROSSTABS     TABLES= GENDER BY TEST2
OPTIONS       5
STATISTICS    1
ONEWAY        TEST3 BY GENDER (1,2)
STATISTICS    1
FINISH
```

The first two statements in the program tell the MUSIC operating system to submit this job to the OS/MVT operating system with the OSJE program. The person running this program is a student, and he wishes the output of the program to be returned to OSJR after the program is finished, rather than having the results printed immediately (see Benchmarks, Vol. 3, No.6 for information about the OSJE and OSJR programs).

The next three statements are job control language statements for the OS/MVT operating system. The first of these is the JOB statement. We can note the following from this JOB statement:

- The student's MUSIC user id is MU99, since these are the first four characters of the job name.
- The full job name is MU99SPSS.
- The student's project number for OS/MVT is 3275-3277.
- He has estimated that the job will take no more than 20 seconds of processing time.
- He has also estimated that the job will print no more than 2,000 lines of output.
- The student's name is John Adams.
- The job does not require a tape, since it is CLASS=A.

The second job control language statement is the EXEC statement. It simply tells OS/MVT to execute the SPSS program. The third JCL statement is the SYSIN DD statement. It tells OS/MVT that all the statements that follow are SPSS program control statements, and there is no more job control language. (See Benchmarks, Vol. 3, No. 6, or the user's guide Using OS/MVT by George Morrow for more information about job control language.)

The rest of the program, with the exception of one statement, is composed of SPSS program control statements. The first is the RUN NAME statement, telling SPSS to start the top of each page of the printout with the words "Analysis of Research Methods Class Data." The second statement is the DATA LIST, which tells SPSS the names and locations of the variables in the data matrix. Note that this statement is continued on the next line, and that the continuation begins in column 16. The third statement tells SPSS that the data for the analysis are located on cards (or their equivalent, in the case of a MUSIC file). The N OF CASES statement tells SPSS there are 20 rows in the data matrix.

The next three statements are data transformation statements. The first creates a new variable, named AVERAGE, which is calculated as the sum of the three test variables divided by three. The second data transformation statement recodes the variable GENDER from M and F to 1 and 2. The third transformation collapses the variable TEST2 into three categories, with those cases having a score between 0 and 65 going into category 1, those between 66 and 80 in category 2, and those above 80 going into category 3.

The next statement requests the first statistical procedure. In this case, it is the CONDESCRIPTIVE procedure. The variables for which descriptive statistics are requested are TEST1, TEST3 and the newly computed variable AVERAGE. No options or statistics are requested for this procedure. Since this is the first procedure, it is followed by the READ INPUT DATA statement. After the READ INPUT DATA statement is the MUSIC command /INC CLASS.DATA. This command directs MUSIC to include the file CLASS.DATA, which contains the data (presented in BENCHMARKS, Volume 3, Number 6, page 18) in the SPSS program at this point. Following the data is the END INPUT DATA statement.

The next set of statements requests the CROSSTABS procedure. A table will be formed with the variable GENDER as the row variable, and the va-

variable TEST2 (which was recoded into categories previously) as the column variable. The student has requested option 5, which calls for the deletion of the total percentages from the table. He has also requested statistic 1, chi square.

The next two statements request a one way analysis of variance with the ONEWAY procedure. The dependent variable is TEST3, and the grouping factor is the variable GENDER. Thus, this procedure will test whether there is a significant difference between the males and females in their scores on the third test. Statistic 1 is requested, which will provide additional information about the means of the males and females. The last statement in the program is the FINISH statement, which tells SPSS that there are no more control language statements. Table 1.15 shows the output from this SPSS program.

Table 1.15

Output From the Example SPSS Program

SPSS BATCH SYSTEM

03/03/82 PAGE 1

SPSS FOR OS/360, VERSION M, RELEASE 9.0, JUNE 10, 1981

CURRENT DOCUMENTATION FOR THE SPSS BATCH SYSTEM

ORDER FROM MCGRAW-HILL:

SPSS, 2ND ED. (PRINCIPAL TEXT); SPSS UPDATE 7-9;
SPSS POCKET GUIDE, RELEASE 9; SPSS PRIMER

DEFAULT SPACE ALLOCATION ALLOWS FOR 102 TRANSFORMATIONS
WORKSPACE 71680 BYTES 409 RECODE VALUES
TRANSPACE 10240 BYTES 1641 IF/COMPUTE OP'S

1 RUN NAME ANALYSIS OF RESEARCH METHODS CLASS DATA
2 DATA LIST FIXED/1 STUDENT 1-2 GENDER 3 (A)
3 TEST1 4-5 TEST2 6-7 TEST3 8-9

THE DATA LIST PROVIDES FOR 5 VARIABLES AND 1 RECORDS
(1 CARDS) PER CASE. A MAXIMUM OF 9 COLUMNS ARE USED ON
A RECORD.

LIST OF THE CONSTRUCTED FORMAT STATEMENT..
(F2.0,A1,3F2.0)

4 INPUT MEDIUM CARD
5 N OF CASES 20
6 MISSING VALUES STUDENT (99) GENDER (0)
7 COMPUTE AVERAGE = (TEST1 + TEST2 + TEST3)/3
8 RECODE GENDER ('M' = 1) ('F' = 2)
9 RECODE TEST2 (0 THRU 65=1) (66 THRU 80 = 2)
10 (81 THRU 99 = 3)
11 CONDESCRIPTIVE TEST1,TEST3,AVERAGE

**** GIVEN WORKSPACE ALLOWS FOR 1433 VARIABLES FOR
CONDESCRIPTIVE PROBLEM ****

12 READ INPUT DATA

The first part of Table 1.15 (which is continued on the next pages shows the first page of the SPSS portion of the printout. (You will have one or more pages of printout that show the output from the job control language portion of your program.) The first line of the printout shows that this is the SPSS program, run under a batch operating system (see chapter 5 for more information on this), and it shows the date the job was run, March 3, 1982. The second line says that this version of the SPSS program is designed for the OS/360 operating system, is version M of the program, is the ninth edition of the SPSS program, and this edition was released on June 10, 1981. The next few lines show where you can get the various manuals and other documentation that describe the SPSS program and how to use it.

The next section of page 1 shows the amount of computer memory space allocated for your SPSS program, and how many operations this allows you to perform. As you can see, this is quite a large amount of space, one which we will probably not exceed. The SPSS Manual describes how to increase this allocation, if needed.

The program then begins to interpret the program control information that we provided. It numbers our statements, and prints them back so that we can see what it was that we told SPSS to do. This is particularly helpful if we have errors that we must correct (see below for more information on SPSS errors). For our example program, it reprints the RUN NAME and DATA LIST statements. It then interprets the DATA LIST statement. It tells us that we listed five variables, that the data for each case occupies only one record or card, and that the data take up only 9 columns on each line. We can then look at our data cards or file to determine if the SPSS interpretation of the DATA LIST statement agrees with the actual format of the data.

SPSS then constructs a FORTRAN language format statement that is equivalent to the format of the data described in the DATA LIST statement. It does this because SPSS is written in the FORTRAN programming language.

The next few lines of the printout are the next set of statements from our example SPSS program. Again, had we made an error in any of these program control statements, SPSS would inform us of it at this point. After interpreting the CONDESCRIPTIVE command, SPSS says that it has enough memory allocated to it to analyze 1,443 variables. We don't have nearly that many, so we know that the program can continue. Finally, the SPSS program interprets the READ INPUT DATA statement, and begins to perform the CONDESCRIPTIVE procedure.

Table 1.15

Output From the Example SPSS Program Continued

ANALYSIS OF RESEARCH METHODS CLASS DATA 03/03/82 PAGE 2

FILE NONAME (CREATION DATE=03/03/82)

VARIABLE TEST1

MEAN	76.900	STD ERROR	4.264	STD DEV	19.067
VARIANCE	363.568	KURTOSIS	15.644	SKEWNESS	-3.765
RANGE	94.000	MINIMUM	0.0	MAXIMUM	94.000
SUM	1538.000				

VALID OBSERVATIONS - 20 MISSING OBSERVATIONS - 0

VARIABLE TEST3

MEAN	78.100	STD ERROR	4.631	STD DEV	20.708
VARIANCE	428.832	KURTOSIS	11.267	SKEWNESS	-3.045
RANGE	98.000	MINIMUM	0.0	MAXIMUM	98.000
SUM	1562.000				

VALID OBSERVATIONS - 20 MISSING OBSERVATIONS - 0

VARIABLE AVERAGE

MEAN	79.867	STD ERROR	4.361	STD DEV	19.502
VARIANCE	380.344	KURTOSIS	16.816	SKEWNESS	-3.964
RANGE	92.333	MINIMUM	0.0	MAXIMUM	92.333
SUM	1597.333				

VALID OBSERVATIONS - 20 MISSING OBSERVATIONS - 0

The second page of the printout shows the results of the CONDESCRIPTIVE procedure. The first line of this page shows us the RUN NAME that we specified in that statement in our program, the date, and the page. The second line tells us the name of the SPSS file we are analyzing, if any. Since we have not defined an SPSS file for this program, it assigns us the file name NCNAME, and tells us the date the file was created. (SPSS will not retain this file unless we tell it to do so. See the next section for more information on SPSS files.)

The rest of this page is devoted to the output from the CONDESCRIPTIVE procedure. The first section contains the descriptive statistics for the variable TEST1, the second section the descriptive statistics for TEST3, and the third section the statistics for AVERAGE.

Table 1.15

Output From the Example SPSS Program Continued

ANALYSIS OF RESEARCH METHODS CLASS DATA 03/03/82 PAGE 3

TRANSPACE REQUIRED.. 300 BYTES

3 TRANSFORMATIONS

7 RECODE VALUES + LAG VARIABLES

5 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED.. 0.25 SECONDS

13 END INPUT DATA

14 CROSSTABS TABLES=GENDER BY TEST2

15 OPTIONS 5

16 STATISTICS 1

*** GIVEN WORKSPACE ALLOWS FOR 3982 CELLS, 3982 TABLES WITH TWO
DIMENSIONS FOR CROSSTAB PROBLEM ***

The third page of the printout begins, like page 1, with the RUN NAME, date and page number. This page then informs us of the amount of memory the program needed to do the RECODE and COMPUTE operations we requested in our control statements, and how much computer processing time (CPU time) has been expended so far. Then SPSS interprets the next set of program control statements we provided. Here it is examining the CROSSTABS statement, and its associated OPTIONS and STATISTICS statements, for errors. Finding none, it announces that it has enough memory to analyze 3,982 two dimensional tables, many more than we have requested.

Table 1.15

Output For the Example SPSS Program Continued

ANALYSIS OF RESEARCH METHODS CLASS DATA 03/03/82 PAGE 4

FILE NONAME (CREATION DATE = 03/03/82)

***** CROSSTABULATION OF *****
 GENDER BY TEST2
 ***** PAGE 1 OF 1

GENDER	TEST2				ROW TOTAL
	COUNT	1.I	2.I	3.I	
1.	1	1	1	8	10
	10.0	10.0	80.0	50.0	
	100.0	100.0	44.4		
2.	0	0	10	10	
	0.0	0.0	0.0	50.0	
	0.0	0.0	0.0		
COLUMN TOTAL	1	1	18	20	
	5.0	5.0	90.0	100.0	

4 OUT OF 6 (66.7%) OF THE VALID CELLS HAVE EXPECTED
 CELL FREQUENCY LESS THAN 5.0
 CHI SQUARE = 2.22222 WITH 2 DEGREES OF FREEDOM
 SIGNIFICANCE = 0.3292

Page 4 of the printout shows the results of the CROSSTABS procedure. SPSS tells us the RUN NAME, date, page number and file name, and then describes the table we have requested, GENDER by TEST2. We can see that GENDER is the variable on the vertical axis of the table, and TEST2 is the horizontal variable. The numbers labelling the rows and columns are the codes for the groups in the data. The entries in each cell are first, the number of students who are members of both groups defined by the codes; second, the percentage this number is of all cases in that row; and third, the percentage of cases in this cell of all cases in the column (recall that with the CPTIONS statement, we requested that the percentage of the total not be printed). The table also contains the total number of students in each row, the percentage this row represents of the total, the number of students in each column, and the percentage of the total number in that column. The bottom right of the table shows the total number of students.

Following the table, SPSS prints the statistics we requested. It warns us that our chi square value may be affected by the uneven distribution of the data in the cells of the table, and prints the chi square value, its degrees of freedom, and its associated significance level.

Table 1.15

Output From the Example SPSS Program Continued

ANALYSIS OF RESEARCH METHODS CLASS DATA 03/03/82 PAGE 5

CPU TIME REQUIRED.. 0.21 SECONDS

17 ONEWAY
18 STATISTICSTEST3 BY GENDER (1,2)
1

* * * ONEWAY PROBLEMS REQUIRES 64 BYTES WORKSPACE * * *

Page 5 of the printout, like page three, tells us the amount of computer processing time consumed by the previous procedure, and interprets the control statements which request the next procedure. We can see that the ONEWAY procedure we have asked for requires very little of the allocated workspace.

Table 1.15

Output From Example SPSS Program Continued

ANALYSIS OF RESEARCH METHODS CLASS DATA 03/03/82 PAGE 6

FILE NONAME (CREATION DATE = 03/03/82)

----- ONEWAY -----

VARIABLE TEST3
BY VARIABLE GENDER

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO
BETWEEN	1	217.8002	217.8002	0.494
WITHIN	18	7929.9897	440.5549	
TOTAL	19	8147.7891		

GROUP	COUNT	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM
GRP01	10	74.8	28.9090	9.1418	0.0
GRP02	10	81.4	6.7363	2.1302	70.000
TOTAL	20	78.1	20.7082	4.6305	0.0

(NOTE:SPSS also provides the estimate of the probability of F, the maximum values and the 95% confidence interval for the means, which were omitted from this table for lack of space)

Page 6 of the printout shows the results of the ONEWAY analysis of variance procedure. After the usual heading, SPSS labels the page with the name of the procedure, and tells us to which variables this procedure applies. It then presents the summary table for the analysis of variance. Following this table, SPSS presents the statistics we requested with the STATISTICS statement (some of which have been omitted due to lack of space). We can see that although the mean score on TEST3 is higher for women (GRP02) than for men (GRP01), this difference is not statistically significant (as shown by the F ratio in the analysis of variance).

Table 1.15

Output From the Example SPSS Program Continued

ANALYSIS OF RESEARCH METHODS CLASS DATA 03/03/82 PAGE 7

CPU TIME REQUIRED.. 0.15 SECONDS

19 FINISH

NORMAL END OF JOB.

19 CONTROL CARDS WERE PROCESSED.

0 ERRORS WERE DETECTED.

The last page of the SPSS printout is page 7. This page tells us that the ONEWAY procedure required .15 seconds of processing time. SPSS then interprets the FINISH statement, and informs us that our program was run with no errors.

```

* * * * *
*           *
*   M U S I C   *
*           *
* * * * *

```

MUSIC Backup Hours

Following are the scheduled hours for the MUSIC backup. A message will be sent to all users signed-on to MUSIC approximately 10 minutes before the backups are begun, and will be in the form: ** MUSIC SHUT DOWN AT xxxxx AM - SCHEDULED BACKUP ** To find out the backup hours while signed-on to MUSIC, enter HELP HOURS

MUSIC Backup Hours

Tuesday	3 AM (for about 3 hours)	Weekly Backup
Wednesday-Saturday	4 AM (for about 2 hours)	Daily Backup
Sunday	10:30 PM (for about 2 hours)	Daily Backup

Effective until December 12, 1982, the MUSIC backup will be done at midnight Saturday instead of 10:30 PM Sunday, so that the MUSIC system will be available to users during peak hours.

ID-Codes to be Cancelled

All MUSIC ID-Codes which have been assigned through classes during the Fall semester will be cancelled on December 20, 1982. It will be the users' responsibility to make a backup copy of their files, should they want one.

```
* * * * *
*           *
*   H P - 2 0 0 0   *
*           *
* * * * *
```

HP NOTES
by
Jeff Brooks

HP 2000 Backup Schedule

Routine system backups are scheduled to be performed at the following times;

8:00 a.m. Monday through Friday for approximately 20 minutes.
4:00 p.m. Friday for approximately 1.5 hours.

Classroom ID's Expire December 17!

If you have an HP 2000 account (ID-Code) that was assigned through a particular class and are interested in keeping your files, you must transfer

them to your personal account by December 17, 1982 or they will be deleted from the system along with your classroom account. If you do not have a personal account and would like one, contact your instructor.

System to Shut Down for End of Semester Processing and Reporting!

The HP will be down from 8:00 a.m. until about noon on Monday, December 20, 1982 to facilitate our End-of-Semester processing and reporting.

Backup Schedule Modified for Holidays!

Due to the special holiday schedule for the Computing Center, a few changes will be made to the system backup schedule for the HP. Naturally, there will be no backups performed on the days that the Center is scheduled to be closed. Also, there will be two 1.5 hour backups, the first beginning at 4:00 p.m. on Thursday, December 23 and the second beginning at 2:00 p.m. on the following Thursday, December 30.

```

* * * * *
*
*   FROM OUR USERS   *
*
* * * * *

```

Just when it seemed as though BENCHMARKS had become an expensive trash-can liner there appeared - voices from the wilderness:

- Address: Mohamad 'God in Charge of Disk Space' Salahshoor and Claudia Putnam - God's Editor Computing Center.

Letter: Dear God,

According to the last Benchmark <sic> (p. 25, Vol 3, # 7) it is written that (Disk) Space is finite. How can you permit such blasphemy?

You and I both know Space is infinite -- it is the ability of man (computer coordinators) to store data which is finite. After having created heaven and earth, additional disk space for those in need should be easy.

Please do not mislead your zealous followers. They may rise up and turn to the Prophet 'Microcomputer' Muhammad Trash 80.

Thank you for your time,
Sincerely -----
Jesus

P.S. Claudia - what happened on page 35/36. I needed a good laugh.
Jesus H. Christ

- In reference to the article "Corrections" in the same issue we received the following:

We at the Print shop are beginning to feel like Rodney Dangerfield "no respect" - and, the only thing we let germinate in the press is the fountain solution - into alcohol which we consume with Benchmark <sic> newsletters.

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In order to utilize BENCHMARKS to its fullest capacity and avoid redundancies, an index of previous issues containing information considered still pertinent to the NTSU Computing Center is included in each issue.

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Happy
Holidays!!!

Request for Copying Outside Tape to NTSU Library Tape

Customer name: _____ Date _____

Project number: _____

Campus address: _____

Campus phone: _____ Department: _____

Other address: _____

Other phone: _____

Current external label on tape: _____ LABEL= _____

Files to be copied (or ALL to copy entire tape): _____

If your tape is NL, complete the information below. You will need to select a dataset name to use on your tape and in your JCL. The DCB information should also be in your JCL - copy it exactly. If the tape has multiple files, supply information for each file.

Dataset Name: _____ File #: _____

DCB Information - LRECL _____ BLKSIZE _____ RECFM _____

Dataset Name: _____ File #: _____

DCB Information - LRECL _____ BLKSIZE _____ RECFM _____

Dataset Name: _____ File #: _____

DCB Information - LRECL _____ BLKSIZE _____ RECFM _____

Dataset Name: _____ File #: _____

DCB Information - LRECL _____ BLKSIZE _____ RECFM _____

Computing Center Authorization _____ Date _____

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